

## Briefs

Specialty Crops

## Sweet Potatoes Are No Longer Just Holiday Fare

*Less-than-ideal weather across the major growing regions in the South this summer is expected to reduce supplies of sweet potatoes this holiday season and the rest of the 1998/99 marketing year. The decline is not likely to be severe, and grower and retail prices are expected up only modestly in 1998/99.*

Sweet potatoes are traditionally associated with Thanksgiving, and shipments rise predictably every November as the holiday approaches. November typically accounts for about 20-25 percent of domestic shipments of sweet potatoes—a root vegetable that is rich in vitamins and minerals, low in fat and calories, and cholesterol-free. Shipments also increase during the holidays that follow (Christmas, Hanukkah, and the New Year), as well as around Easter. These major winter and spring holiday seasons together account for about 40-45 percent of domestic sweet potato shipments.

Although sales always shoot up during the holidays, consumers appear to be showing an increased interest in sweet potatoes throughout the year. In recent years, consumption of sweet potatoes during the summer (June-August) has increased significantly compared with the early 1980's. Summer sweet potato shipments averaged nearly 15 percent of the annual total in 1995-97, up from only 7 percent during 1980-82.

Year-round popularity is boosting overall per capita consumption of sweet potatoes and has helped reverse a declining trend. Per capita utilization averaged 4.6 pounds in 1994-97, up nearly 10 percent from the 1989-93 average. Per capita use had reached an all-time low of 3.9 pounds per person in 1993 following a slow and steady decline that began in the 1920's when sweet potato consumption was 29 pounds per person. Growing consumption of other vegetables, such as white potatoes in processed form, helped lower sweet potato consumption during this period.

The recent turnaround in consumption may be attributed to several factors, including improved storage facilities, introduction of new sweet potato products, and increased use of sweet potatoes in the food-service industry. Over the past 20 years, many growers have invested in improved storage facilities so they can offer quality sweet potatoes year-round. After a curing process (in which the sweet potatoes are placed in a heated, humid environment for several days and then cooled), sweet potatoes can be stored for up to a year in controlled-atmosphere sheds, depending on product condition.

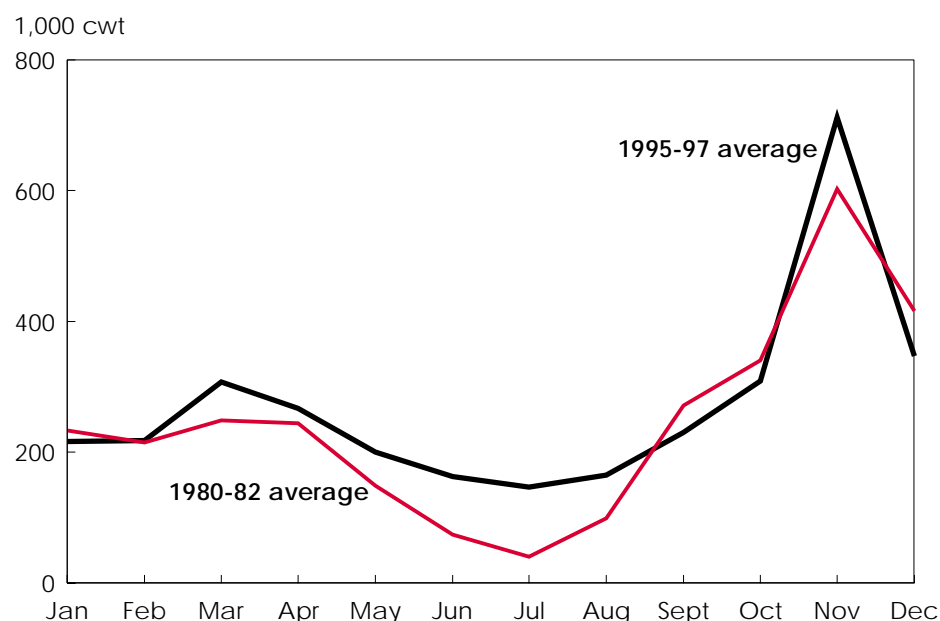
Besides increasing the storability of sweet potatoes, the curing process helps smooth exterior imperfections and converts natural starches in the sweet potatoes to sugar—an improvement in taste for many consumers. Green (uncured) product is typically shipped toward the end of the summer into the early fall, as cured product from the previous crop begins to

dwindle and fresh product from the new crop is being harvested. Harvest varies by production area but generally begins with small quantities in mid to late June and runs into November. Cured sweet potatoes are typically shipped beginning in late October or early November, and can last into August or September.

Year-round availability and improved product quality has led to inroads in the food-service industries. Many restaurants, particularly several national steakhouse chains, have added sweet potatoes to their menus as a complement or alternative to white potatoes. Sweet potatoes can be served boiled, baked, and mashed, or used in casseroles, breads, and pies. Sweet potatoes can even be french fried and chipped like white potatoes. And unlike white potatoes, cured sweet potatoes can even be served raw like carrots (as sticks, shavings, etc).

Sweet potatoes are produced in 25-30 states. However, commercial production is concentrated in 11 states, mostly in the South. The leading producers are North Carolina (36 percent of U.S. production in 1997), Louisiana (25 percent), California (15 percent), and Mississippi (8 percent). On average, about 87 percent of the U.S.

### Summer Demand for U.S. Sweet Potatoes Is Up from the Early 1980's



Economic Research Service, USDA

sweet potato crop is sold for food uses. Nonfood uses include 8 percent seed and 5 percent animal feed, shrinkage, and losses.

Most of the U.S. supply of sweet potatoes is domestically produced, but imports (including yams, a botanical cousin) have increased over the last 20 years. Imports currently account for about 5 percent of supply (up from 1 percent in 1978). However, much of this volume goes directly to Puerto Rico from Costa Rica, the Dominican Republic, and Jamaica and does not reach the continental U.S. U.S. exports of sweet potatoes are also fairly small—only about 2 percent of annual production.

In 1997, the U.S. exported 30 million pounds of sweet potatoes, at a value of \$8.9 million. The vast majority of these exports (97 percent) went to Canada, with over 5 million pounds of product shipped in October when Canadians celebrate Thanksgiving. The second-largest export market is the United Kingdom (0.5 million pounds in 1997).

With a seemingly renewed consumer interest in sweet potatoes, grower cash receipts for sweet potatoes increased 34 percent between 1990-93 and 1994-97, totaling \$208 million in 1997. Consistent yields and relatively stable prices in the past several years have kept plantings relatively stable. For 1998, harvested area was likely down less than 1 percent from a year ago (planted area was down 1 percent this spring). North Carolina reported a slight increase in harvested area (up 3 percent), while Louisiana and Mississippi remained unchanged. California harvested acreage was down 6 percent due to excessive rain during planting.

Despite little change in overall harvested acreage, production is likely to be down in 1998 from a year ago due to a lower national average yield. Weather conditions for much of the 1998 growing season were less than ideal in many sweet potato growing areas. From 1994 to 1997, yields were well above the long-term trend, due partially to adoption of improved varieties that are specific to soil type and climate.

Until late August, much of North Carolina's crop suffered from hot, dry condi-

tions. However, late August and early September hurricanes (Bonnie and Earl) brought much-needed rain without damaging winds—allowing the crop to size nicely. Overall, crop quality is good.

Circumstances are similar in Louisiana, but the outcome may be mixed. Southern Louisiana suffered from summer drought, then was hit by heavy rains in September. The rain encouraged sweet potato sizing, but excessive moisture in some fields contributed to crop deterioration, including formation of soft spots. In northern Louisiana, some farmers irrigated, and some areas received timely rain at the end of the growing season. For the State, harvest ran behind schedule throughout the season, and output is likely to be down from last year. Quality is expected to be generally good.

### Specialty Crops

## Higher Tree Nut Prices for the Holidays

Smaller production of U.S. tree nuts, except pistachios, will result in generally higher prices this holiday season and into 1999. However, larger carryover from last year's record crops will augment supplies and moderate price increases. With the largest beginning stocks in 3 years, supply is off only 9 percent, despite a drop of 27 percent in total output.

U.S. production of the six major tree nuts (almonds, walnuts, pecans, pistachios, macadamias, and hazelnuts) is expected to total nearly 900 million pounds (shelled basis) in 1998, the third-highest during the last 5 years. Cool, wet spring weather hampered tree nut crop development for California almonds and walnuts and for Oregon hazelnuts. The inclement weather also delayed nut maturity and harvest by as much as 2 weeks in some areas. Growers and handlers (firms that process and market nuts) prefer an early harvest because it allows them to sell their product into markets in advance of foreign competition and establish a "seller's position."

Hot, dry conditions in many areas of the Pecan Belt (southern tier of states) from spring to mid-summer caused pecan yields

USDA's National Agricultural Statistics Service will release the first forecast of sweet potato yield and production in January 1999. With a yield decline of 10 percent (to 146 cwt per acre), production would be approximately 12.1 million cwt. At that level, grower prices could rise from last year's season average of \$15.80 per cwt to as high as \$16-\$17. A more moderate 2-5 percent decline in yields (12.8-13.2 million cwt in production) would likely peg season-average price at \$15.50-\$16.50. Shipping-point prices are virtually unchanged this fall from a year ago in North Carolina and Louisiana. Markets show steady demand, with volume about 10 percent lower in Louisiana and 15 percent higher in North Carolina compared with a year earlier.

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to fall substantially. Abundant rains came later in the season, but were generally not beneficial to this year's production.

Smaller supplies and higher prices will cut total domestic tree nut consumption to 580 million pounds (2.1 pounds per capita) in 1998/99, down 2 percent from a year earlier. This figure includes tree nut imports—mostly cashews, Brazil nuts, pecans, chestnuts, pine nuts, and some others—which are expected to remain steady this season at about 240 million pounds. Exports are projected at 630 million pounds, slightly lower than last season but the second-highest on record.

*Almond prices will rebound as supply shrinks.* Almond production in California is forecast at 540 million pounds (shelled), down 29 percent from last year's record. But coupled with large carryover stocks, total marketable supply (excluding culls and inedibles) should be the third highest on record at 690 million pounds. Grower prices this season are expected to be near \$2 per pound, up from an average of \$1.55 in 1997/98 but below 1996/97 (\$2.08) and 1995/96 (\$2.48).

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## Large Beginning Stocks Help Offset Lower U.S. Tree Nut Output in 1998/99

Commodity/ season	Beginning stocks	Marketable production <sup>1</sup>	Imports	Total supply	Domestic consumption	Exports	Ending stocks	Grower price
<i>Million lbs.</i>								<i>\$/lb.</i>
Almonds:								
1996/97	92.8	489.3	1.2	583.3	130.7	401.4	48.3	2.08
1997/98	48.3	722.5	0.1	770.9	136.2	462.8	171.9	1.55
1998/99	171.9	515.0	0.1	687.0	147.0	410.0	130.0	N.A.
Hazelnuts:								
1996/97	4.1	13.6	3.2	20.9	6.5	14.0	0.4	1.07
1997/98	0.4	30.8	10.4	41.6	19.9	20.3	1.4	1.24
1998/99	1.4	12.1	3.1	16.6	3.4	12.8	0.4	N.A.
Pecans:								
1996/97	85.9	99.0	28.1	213.0	133.7	19.6	59.7	1.43
1997/98	59.7	149.1	32.9	241.7	122.4	20.8	98.5	1.75
1998/99	98.5	80.6	38.0	217.1	125.4	13.5	78.2	N.A.
Walnuts:								
1996/97	55.3	169.6	0.3	225.2	82.2	102.7	40.3	1.84
1997/98	40.3	220.5	2.3	263.1	120.1	94.1	48.9	1.59
1998/99	48.9	188.1	2.9	239.9	110.0	98.4	31.5	N.A.
Pistachios:								
1996/97	13.8	40.4	0.9	55.1	15.2	32.2	7.7	3.01
1997/98	7.7	74.9	1.0	83.6	35.9	41.6	6.1	2.72
1998/99	6.1	81.2	0.9	88.2	35.8	45.4	7.0	N.A.
<b>All tree nuts<sup>2</sup>:</b>								
1996/97	251.9	824.8	212.7	1,289.4	524.3	605.9	156.4	N.A.
1997/98	156.4	1,211.0	242.3	1,609.7	590.0	692.9	326.8	N.A.
1998/99	326.8	890.2	242.0	1,459.0	577.8	634.1	247.1	N.A.

N.A.=Not available.

Shelled basis. 1997/98 preliminary. 1998/99 forecast. Season beginning July 1 for almonds, hazelnuts, and pecans; August 1 for walnuts; September 1 for pistachios.

1. Total production less inedibles and noncommercial use. 2. Includes macadamias as well as tree nuts not produced in the U.S.

Economic Research Service, USDA

The 1997/98 season marked the second consecutive year when almond value exceeded \$1 billion. Almond exports reached a record 463 million pounds, while domestic consumption increased slightly to 136 million pounds (0.51 pounds per person). With a large share of the crop exported, almonds account for only about 25 percent of total domestic consumption of tree nuts compared with 60 percent of total tree nut production. U.S. export volume and domestic prices in 1998/99 will depend on competing tree nut supplies, particularly Spanish almonds (down sharply) and Turkish hazelnuts (up sharply). World almond production is estimated to be off 29 percent this season.

*Walnut production drops as well.* California production of English walnuts is forecast to decrease 28 percent to 220,000 tons (in-shell) in 1998, well below last year's record. Grower prices are expected to increase to near \$1,400 per ton (in-shell) in 1998/99 as supplies contract 9 percent. Grower prices last season aver-

aged \$1,310 per ton (in-shell), near the mid-point of average prices received during the past 10 years (\$1,000-\$1,600). Some price breaks may occur this season, depending on global tree nut supplies and regional market demand. The California walnut industry, for example, is pushing demand by offering wholesale price discounts for early-season shelled walnuts. U.S. exports have trended up in recent years, but walnuts produced in France and China are expected to provide keen competition this year in European markets. World walnut production is estimated to be 5 percent lower this season.

*Pecan crop is down sharply.* Drought and hot weather conditions through much of the South and Southwest reduced the 1998 pecan crop to 183 million pounds (in-shell), sharply lower than last year's 338 million pounds. The smaller crop will be partially offset by higher beginning stocks and more imports expected from Mexico, so grower prices may rise only modestly this season. In addition, the final

crop size last year was much larger than buyers and sellers assumed when they negotiated prices. Consequently, handlers have been working down "expensive" inventory and will be reluctant to bid prices up sharply.

*Record pistachio production surprises industry.* The 1998 California pistachio crop is forecast at a record 195 million pounds (in-shell), following last year's record 180 million pounds. A much smaller crop was expected because pistachio trees are typically "alternate bearing." This year's yield is expected to be a record 2,960 pounds per acre, and area is record high at 65,900 bearing acres.

Last year's crop depressed grower prices only slightly, and the value climbed to a record \$203 million. A much smaller crop in Iran, the world's largest producer and exporter, created substantial foreign market opportunities for U.S. exports. This season, Iranian production will likely be up, which will increase competition for California

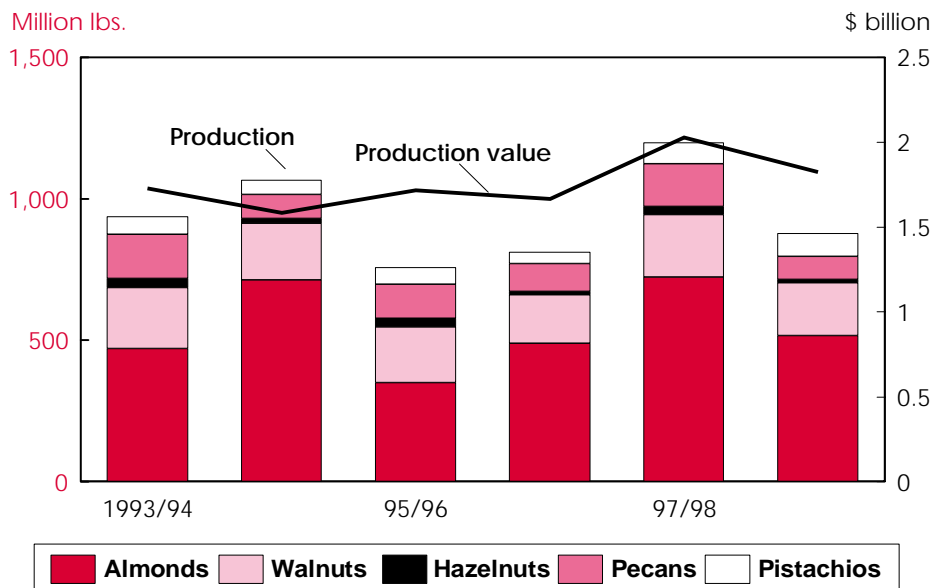
pistachios. About 50 percent of the U.S. crop is typically exported. Carryover stocks of pistachios are relatively small, so handlers must rely on current crop supplies to meet domestic and export demand.

*Hazelnut production falls sharply.* Hazelnut production in Oregon and Washington is forecast at 16,500 tons (in-shell). This compares with the record 47,000 tons in 1997 and 18,500 tons in 1996 and continues an alternate-bearing pattern of the last several years. Poor weather affected bloom and crop development, and the trees are recovering from record-high yields last year. While the U.S. crop is much smaller than production in Turkey, the world's largest hazelnut producer, U.S. hazelnuts are recognized in the world market for their size and quality. In 1998/99, U.S. hazelnut prices may decline despite the small crop because Turkey's production is up sharply. According to industry estimates, the Turkish hazelnut crop is 650,000 metric tons (in-shell), up 35 percent from 1997.

*Total value of U.S. tree nut production is a record.* Value exceeded \$2 billion for the first time in 1997/98. Gross return per acre, excluding pecans, averaged \$2,524 per acre, the highest on record and \$320 above the previous marketing season. Strong export demand is a major factor behind these favorable financial returns. During the 1994/95 marketing season, total export quantity exceeded domestic use for the first time and has been above it ever since. In 1998/99, about two-thirds of the crop is projected to be exported, compared with just under half in 1988/89.

Higher returns in recent years have affected plantings. U.S. bearing acreage of tree nuts reached a record of over 700,000 acres in 1997/98 and is expected to increase another 1 percent this season. (Pecan acreage is excluded from the total and not estimated, because a significant

### U.S. Tree Nut Output Down Sharply in 1998



Shelled basis. 1998/99 forecast. Production excludes macadamia nuts as well as inedibles and noncommercial use.

Economic Research Service, USDA

part of production comes from native and seedling plants which grow wild or in small and widely scattered plantings.)

Despite this year's downturn, tree nut production is expected to continue trending upward, as new acreage more than offsets acreage losses. Typically, growers remove some trees 8-12 years after planting as orchards become crowded. But instead of removing and discarding trees, some growers, particularly pecan producers, are beginning to transplant them to another location to start a new orchard. This reduces the "startup" time to reach full bearing yields from 7-8 years to about 2-3 years. New orchards are also being planted with more trees per acre. In addition, new varieties produce at an earlier age, are more prolific at maturity, and are more resistant to disease and insects.

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### Upcoming Reports—USDA's Economic Research Service

The following reports will be issued electronically on dates and at times (ET) indicated.

#### December

- 1 Food Security Assessment (3 p.m.)
- 2 Sugar and Sweeteners\*
- 17 Agricultural Income and Finance\*
- 21 Agricultural Outlook\*
- 22 U.S. Agricultural Trade Update (3 p.m.)

\*Release of summary, 3 p.m.